

[Combining nmr, density, and dielectric measurements for determining downhole reservoir fluid volumes]

Abstract of Disclosure

A method for evaluating formation fluids includes measuring a nuclear magnetic resonance property related to a total volume of the formation fluids, measuring a dielectric property related to an electromagnetic wave travel time, measuring a bulk density, and solving a set of linear response equations representing a reservoir fluid model to determine fractional fluid volumes from the nuclear magnetic resonance property, the dielectric property, and the bulk density.

Figures